

Laboratory refrigerators and freezers

Slimline®



- plasma freezers (-30 / -35°C)
- blood bank refrigerators (+4 °C)



MS
Laborgeräte
MS-L GmbH
www.MS-L.de

MS-L GmbH
Kälte- und Temperiertechnik
Schönbornstr. 7
D-69168 Wiesloch bei Heidelberg

Tel: 06222 / 93 56-60
Fax: 06222 / 93 56-66
www.MS-L.de * info@MS-L.de

Slimline® laboratory / pharmacy refrigerators & freezers

The Slimline® laboratory refrigerators and freezers offer a wide range of configurations ranging from routine laboratory applications up to high demanding storage protocols for blood banking. Temperature ranges which are available:

laboratory series

- LR serie + 1°C / + 8°C
- LF serie -18°C / -22°C
- LDF serie -30°C / -35°C
- LRF serie + 4°C & -35°C

blood bank series

- BB serie + 4°C
- BP serie -35°C
- BBP serie + 4°C & -35°C



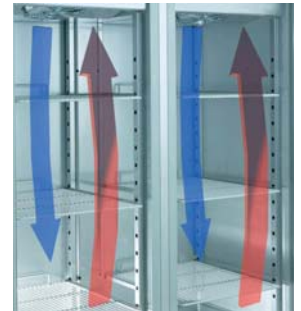
Temperature uniformity and recovery



fixed doors are also lighted

All temperature configurations offer forced air circulation by internal fans to ensure superior temperature uniformity and fast temperature recovery. Our line is available in several storage capacities: 130 liter (undercounter / benchtop), 610 liter (single door upright) and 1325 liter (double door upright). Additionally we offer our combination fridge / freezer (2 x 286 l).

The philosophy behind our Refrigerator and Freezer line is to offer the safest environment for your products by using our UltraSafe® temperature control system in combination with the circulating forced air.



superior temperature uniformity by double evaporators for 1400 serie

Slimline® performance features

- Only Slimline® uses standard stainless steel interior and exterior on all cabinets;
- Microprocessor control with digital display / controller;
- Adjustable temperature set points;
- High temperature alarm;
- Low temperature alarm;
- Date, time, alarm buzzer;
- Infrared data transmission;
- Dry contact for remote alarm;
- Door open alarm;
- Unique traceability of alarms with storage history of last 20 alarm events;
- Light on/off (in case of glass door);
- Auto switch off fan when door opens;
- Automatic defrost cycle and melt water evaporation in heated tray;
- Chamber with rounded corners for easy cleaning;
- 60 mm of CFC-free polyurethane foam insulation;
- Always pass through standard doors because of Slimline® design: only 80 cm wide and 198 cm high;
- Standard fitted with heavy duty double-roll casters for easy transportation (lockable);
- Easy to mount stainless steel adjustable feet also come standard inside every cabinet;
- Flexible storage: you can mix drawers, grids and shelves in one cabinet without any internal modifications.



double-roll casters for easy transportation (lockable).



easy to mount stainless steel adjustable feet come also with every cabinet

Slimline® blood bank refrigerators +4°C



BB700

The supreme members of the Slimline® refrigerators are the blood bank refrigerators. All BB series come standard with double layer glass doors with dual bulb light. For convenient storage of blood bags the units are equipped with heavy-duty stainless steel roll-out drawers.

The standard 7-day chart recorder with battery backup, ensures constant temperature recording even during power failures. The independent sensor for the recorder is installed in a buffered solution to display the exact temperature in a blood bag!



The BB series: the answer for safe and efficient storage of blood bags. The series are available in 130 liter (undercounter / benchtop), 610 liter (single door upright) and 1325 liter (double door upright).



Model no:	BB130	BB700	BB1400
Capacity	130 l	610 l	1325 l
Doors	1 glass door (double layer)	1 glass door (double layer)	2 glass doors (double layer)
Lights	single bulb	dual bulb, quick-change fluorescent	
Door locks	1	1	2
Air circulation	forced air circulation by inner fan		
Defrost	fully automatic defrost cycle		
Temperature range	+2°C to +6°C (factory set on +4°C)		
Temperature precision	+/- 0.5°C	+/- 0.5°C	+/- 0.5°C
Temperature stability	+/- 1 °C	+/- 1 °C	+/- 1 °C
Temperature uniformity	+/- 2°C	+/- 2°C	+/- 2°C
Microprocessor	adjustable set-point, high alarm, low alarm, door alarm** (audible, visual and remote alarm)		
Chart recorder	7-day chart recorder In wall mountable box	7-day chart recorder factory installed in top panel	
External dimensions W x D x H mm	630 x 567 x 850	710 x 800 x 1985	1420 x 800 x 1985
Internal dimensions W x D x H mm	540 x 415 x 460	590 x 675 x 1380	1300 x 675 x 1380
Drawers	3 roll-out drawers	6 roll-out drawers	12 roll-out drawers
W x D x H mm	475 x 290 x 75	490 x 610 x 150	490 x 610 x 150
Cabinet material	stainless steel inside and outside		
Insulation	60 mm non-CFC, foamed polyurethane		
Certification	CE certified		
Electrical		220-240V, 50/60* Hz	
Average power consumption	0.22 kWh	0.36 kWh	0.41 kWh
Net weight	55 kg	190 kg	335 kg
Shipping dimensions W x D x H mm	65 kg 670x645x1020	200 kg 730x840x2040	345 kg 1440x840x2040

above data is tested with empty units set on +4°C and ambient temperature of +22°C.

* 60 Hz version is available on special request

** BB130 door alarm optional

Slimline® blood plasma freezers -35°C

The supreme members of the Slimline® freezers are the blood plasma cabinets. For convenient storage of plasma bags the units are equipped with heavy-duty stainless steel roll-out drawers.

The standard 7-day chart recorder with battery backup, ensures constant temperature recording even during power failures. The independent sensor for the recorder is installed in a buffered solution to simulate exact temperature in a plasma bag!



BP700

BP130



The BP series: the answer for safe and efficient storage of plasma bags. The series are available in 130 liter (undercounter / benchtop) and 610 liter (single door upright).

Model no:	BP130	BP700
Capacity	130 l	610 l
Doors	1 stainless steel door	1 stainless steel door
Door locks	1	1
Air circulation	static cooling	forced air circulation by inner fan
Defrost	fully automatic defrost cycle	
Temperature range	-30°C to -35°C (factory set on -35°C)	
Temperature precision	+/- 0.5°C	+/- 0.5°C
Temperature stability	+/- 1 °C	+/- 1 °C
Temperature uniformity	+/- 2°C	+/- 2°C
Microprocessor	adjustable set-point, high alarm, low alarm, door alarm** (audible, visual and remote alarm)	
Chart recorder	7-day chart recorder In wall mountable box	7-day chart recorder factory installed in top panel
External dimensions W x D x H mm	630 x 567 x 850	710 x 800 x 1985
Internal dimensions W x D x H mm	540 x 415 x 460	590 x 675 x 1380
Drawers W x D x H mm	3 roll-out drawers 475 x 290 x 75	8 roll-out drawers 490 x 610 x 150
Cabinet material	stainless steel inside and outside	
Insulation	60 mm non-CFC, foamed polyurethane	
Certification	CE certified	
Electrical	220-240V, 50/60* Hz	
Average power consumption	0.32 kWh	0.53 kWh
Net weight	64 kg	205 kg
Shipping dimensions W x D x H mm	69 kg 670x645x1020	220 kg 730x840x2040

above data is tested with empty units set on -35°C and ambient temperature of +22°C.

* 60 Hz version is available on special request

** BP130 door alarm optional

Slimline Blood Bank and Plasma Freezers

Approximate capacity for blood bags*

Model BB700: 288 bags (6 drawers, 4 bags wide, 12 bags deep)*

Model BB1400: 576 bags (12 drawers, 4 bags wide, 12 bags deep)*

Model BP700: 320 bags*

Model BBP300: BB part: 144 bags, lower 120 bags*

Model BB130: 70 bags (3 drawers)*

** capacity depending on bag size and storage method*

Storage of blood and plasma:

The different components of the blood have different storage lives.

Blood cells can be stored for maximum 35 days in a controlled environment of 2°C to 6°C

Plasma is frozen fast down to -40°C and later stored around -30°C. These prepared plasma products can be stored at least 1 year.